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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,067	01/10/2001	Jerry Dwayne Holland	12350.0008	7121

7590

06/25/2003

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EXAMINER

CULBERT, ROBERTS P

ART UNIT

PAPER NUMBER

1763

DATE MAILED: 06/25/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/758,067

Applicant(s)

HOLLAND ET AL.

Examiner

Roberts Culbert

Art Unit

1763

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 June 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 22-34,36,37,39-42,44-55,57,59 and 61.Claim(s) withdrawn from consideration: 1-21,35,38,43,56,58,60 and 62.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

GREGORY MILLS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

Continuation of 5. does NOT place the application in condition for allowance because:

The arguments submitted in paper No. 10 are not persuasive. Applicant has argued that the '333 reference does not disclose the use of non-abrasive media made from plastic or a metal. The argument is not persuasive because the '333 reference does disclose metal media that is commonly used for burnishing. (Col 1, Lines 40-42)

Applicant has argued that the ceramic media elements shown in the '333 patent are much harder than the plastic and metal elements as claimed, but has provided no evidence that this is true.

Applicant has argued that the use of non-abrasive media, plastic, or metal to "remove the black mode... for further refining" is not disclosed in the '466 reference, and therefore, the combined references do not disclose or suggest all the limitations of the claims. The argument is not persuasive because the '333 reference discloses the limitation as claimed. There is no requirement that all combined references contain every limitation of a rejected claim.

Applicant has argued that the '466 patent does not show the use of a tumbling chip alone for superfinishing the surface of a metal article, however this is not a limitation of the claims.

Applicant has argued that the '466 reference does not show the use of non-abrasive particles. However the '466 patent defines abrasive as "a relative term requiring only that the so-called abrasive be made of a harder material than that which is being abraded". Applicant's definition is entirely different reciting that non-abrasive media lose less than 0.1% of their weight by hour while achieving a superfinished surface under intended processing conditions.

Applicant has argued that the '333 reference requires media that have a density of at least about 2.75 g/cc whereas in the instant application, the density of the plastic media is around 1.8 g/cc. Applicant concludes that the '333 reference teaches away from the claimed invention. The argument is not persuasive because the density range cited in the '333 reference is broad as shown by the examples. Media A, for example, has a density of 2.4 g/cc and although it produces a less refined surface, has a very low attrition rate as well as the shortest finishing time. One of ordinary skill in the art would have been motivated at the time of invention to explore the advantages at the limits of the density range (finish quality vs. time). Further, the claimed density range around 1.8 g/cc is sufficiently close that one of ordinary skill in the art would expect the resulting finishing properties to be approximately the same (improved specular condition).

Applicant has argued that since the '333 patent teaches that the metal media give an undesirable result that the reference teaches away from the claimed invention. The argument is not persuasive because the reference teaches that the use of steel balls as media is old in the art for burnishing metal parts. (Col. 1, line 42). Even though the references teach that the steel balls are not preferred due to an undesirable effect, the media have clearly been used for the purpose in the prior art.